# Development Document for Stormwater Regulations to Address Discharges from Newly Developed and Redeveloped Sites

# MS4 Area Geospatial Analysis Documentation

# Draft - August 2, 2013

Developed for:

Rachel Herbert and Holly Galavotti

U.S. EPA, Office of Wastewater Management, Water Permits Division

Developed by:

John Kosco and Ehren Hill

Tetra Tech, Inc.

Developed under EPA contract Number EP-C-11-009, work assignments No. 1-05 and 2-05.



#### Introduction

Stormwater discharges from municipal separate storm sewer systems (MS4s) were permitted under two separate phases (<a href="http://cfpub.epa.gov/npdes/stormwater/munic.cfm">http://cfpub.epa.gov/npdes/stormwater/munic.cfm</a>). Phase I MS4s were generally medium and large cities or certain counties with populations of 100,000 or more. Phase I MS4 individual permits were issued in the 1990s. Phase II addressed stormwater discharges from small MS4s in Census-defined urbanized areas. These small Phase II MS4 permits were issued beginning in 2003.

The Phase I MS4 permits generally covered the entire jurisdiction for the cities and counties permitted. For Phase II MS4s, the permit area was generally the Census-defined urbanized area, although some states extended permit coverage to the entire jurisdiction if a portion of the jurisdiction was urbanized. Phase II also included designated MS4s outside of urbanized areas (some MS4s over 10,000 people) and waivers for very small MS4s (generally those below 1,000 people in the urbanized area).

# MS4 Map Development

This document details the procedures that were used to create GIS layers of the MS4 Phase I and Phase II MS4 areas across the country. In addition, combined sewer systems (CSS) were also included where data was available, primarily in EPA Region III.

The MS4 layers (Phase I, II, & CSS) are based on lists of MS4s provided to EPA by the States, reviews of state NPDES stormwater websites, and review of Phase I and Phase II MS4 permits.

In general, the Phase I MS4 permit coverage includes the entire jurisdiction for the cities and counties designated for coverage. The Phase II MS4 permit coverage is based on the 2000 Census urbanized areas, with adjustments made based on information specific to each state. For example, some states permitted entire cities if only a portion of the city was within the urbanized area, and other states permitted entire jurisdictions outside of urbanized areas. The following attachment describes how the Phase I and Phase II MS4 GIS layers were created for each state.

The 2010 Census urbanized area data was released as Tetra Tech was developing the MS4 maps. Tetra Tech added a third layer to identify as "Phase II New" those areas in the 2010 Census urbanized area that are not already included in Phase I or Phase II areas.

The base layers used for the MS4 mapping included shapefiles from the U.S. Census Bureau downloaded from: <a href="http://www.census.gov/geo/www/cob/bdy">http://www.census.gov/geo/www/cob/bdy</a> files.html. Boundary files used included the 2000 incorporated places/census designated places (the 2010 place later was not available when this project started) and the 2000/2010 urban areas.

- tl 2009 us\_county00
  - o http://www2.census.gov/cgi-bin/shapefiles2009/national-files

- tl\_2010\_place00
  - o http://www.census.gov/cgi-bin/geo/shapefiles2010/layers.cgi
- tl\_2009\_cousub00\_townships
  - o http://www2.census.gov/cgi-bin/shapefiles2009/state-files?state=42

The Census place layer does not include township boundaries, which are considered "sub-county" units of government. Because some states permit townships as MS4s, Tetra Tech also included township boundary information for about 8 states. Township data from several states was not available from the Census and was downloaded from individual state websites:

Illinois townships

http://www.isgs.uiuc.edu/nsdihome/webdocs/st-basem.html

PA townships

New Jersey townships

https://njgin.state.nj.us/NJ NJGINExplorer/jviewer.jsp?pg=DataDownloads

Ohio

http://www.dnr.state.oh.us/dnnapps/gims/response.asp?county=Statewide&category=Select&Submit1=SELECT

# Using the MS4 GIS data

There are several issues to consider when using the MS4 GIS layer:

- GIS layer does not necessarily link to permitted MS4s The GIS layer maps the MS4 area, but
  does not necessarily link to individual permittees. For example, where an entire urbanized area
  within a state is designated as Phase II, EPA mapped this area but did not attempt to ensure that
  each permitted MS4 was included within this area as a separate polygon.
- Waived MS4s may be mapped as permitted MS4s EPA removed MS4s when information was available that the MS4 had received a waiver from the permitting authority. However, most states did not publish their listed of waived MS4s, therefore the MS4 GIS layer may include some small unpermitted cities within urbanized areas as permitted Phase II MS4s.
- Newly permitted MS4s may not be included EPA updates this MS4 map as information becomes available, but newly permitted MS4s may not be included.
- Place polygons include CDPs, which are not individually regulated as MS4s Census designated places (CDPs) are unincorporated areas that the Census assigns a name. CDPs are not incorporated and are therefore not individually regulated as MS4s (they are typically within regulated counties). When looking at potentially regulated MS4s, CDPs must be excluded.

# Attachment – Summary of MS4 Permit Coverage by Region/State

The following information summarizes how the MS4 permit coverage maps were created for each State, organized by EPA Region. For each State, Tt describes the Phase I and Phase II MS4 permit areas used to create the GIS layers. In most cases, Phase I MS4 permit areas included the entire jurisdictional boundary of identified cities/counties and Phase II MS4 permit areas included the latest Census-designated urbanized areas. Details on how each State identified Phase I and Phase II areas, which Tt used to create the MS4 permit coverage GIS layer, are described below.

# MS4 Permittees in EPA Region 1

EPA Region 1 sent Tt a zipped shape file with projection and metadata files on May 5, 2010 (email from David Gray to John Kosco and Holly Galavotti, May 5, 2010). Tt used this shape file and verified it with the information below.

#### Connecticut

Phase I: jurisdictional boundary of Stamford, CT

Phase II: urbanized area

#### Massachusetts

MS4 list - http://www.epa.gov/region1/npdes/stormwater/ma.html (verified 2/4/2013)

Phase I: jurisdictional boundary of Boston and Worcester

Phase II: urbanized areas

NOTE: Region 1 produced map is available at

http://www.epa.gov/region1/npdes/stormwater/ma/MA PermitType.pdf

#### Maine

MS4 list – see Appendix A in <a href="http://www.maine.gov/dep/land/stormwater/ms4/final">http://www.maine.gov/dep/land/stormwater/ms4/final</a> 2008 ms4 gp.pdf (verified 2/4/2013)

Phase I: none

Phase II: urbanized area

#### **New Hampshire**

MS4 list - http://www.epa.gov/region1/npdes/stormwater/nh.html (verified 2/4/2013)

Phase I: none

Phase II: urbanized area – there are no additional small MS4s designated (SOURCE: <a href="http://www.epa.gov/region1/npdes/stormwater/MS4">http://www.epa.gov/region1/npdes/stormwater/MS4</a> 2008 NH.html).

#### **Rhode Island**

Phase I: none

Phase II: urbanized area

#### Vermont

MS4 list – are identified on <a href="http://www.vtwaterquality.org/stormwater/htm/sw">http://www.vtwaterquality.org/stormwater/htm/sw</a> ms4.htm

Phase I: none

Phase II: urbanized area and stormwater-impaired watersheds.

NOTE: Map is at <a href="http://www.anr.state.vt.us/dec/waterq/stormwater/images/sw">http://www.anr.state.vt.us/dec/waterq/stormwater/images/sw</a> ms4-map.jpg

In a notice on March 23, 2010, VT DEC asked for public comments on preliminary designations of City of Rutland, the Town of Rutland, the City of St. Albans, the Town of St. Albans, and the Vermont Agency of Transportation within the geographic boundaries of the municipalities listed above, as small municipal separate storm sewer systems (MS4) subject to regulation under the National Pollutant Discharge Elimination System (NPDES).

http://www.vtwaterquality.org/stormwater/docs/ms4/sw ms4designation extension.pdf

#### **New Jersey**

Phase I: None

Phase II: Entire State is included in the MS4 map (entire State is a Phase II MS4).

#### **New York**

Phase I: New York City

Phase II: MS4 map includes both the full municipal boundaries for regulated MS4s in Census UA, along with boundaries of watersheds of concern in certain TMDL areas. Data was provided by NY DEC.

#### From NY DEC:

In some areas, where regulated MS4s are subject to certain TMDL requirements, the boundaries are extended to the boundaries of watersheds of concern (this may include MS4s that are not regulated based on the Census UA definition). These areas are referred to as watershed improvement strategy (WIS) areas in the MS4 permit.

The boundaries of all the regulated MS4s are extended to the municipal boundaries for MCMs 4 and 5. This means that the construction and post-construction requirements of the permit are equally implemented throughout the political boundaries of the municipalities.

#### **Puerto Rico**

Phase II: MS4 map includes urbanized area. http://www.epa.gov/region02/cepd/stormwater.html

#### Virgin Islands

No MS4s

NOTE: The combined sewer system (CSS) areas in Region 3 were developed for a separate Chesapeake Bay TMDL project. Tt included this CSS layer in Region 3 and excluded any Phase I or Phase II areas from overlapping with the CSS area.

#### **Delaware**

Phase I: New Castle County, including the incorporated cities of Bellefonte, Elsmere, Delaware City, Newport, New Castle, and Wilmington. Cities within New Castle County that are not included in the Phase I MS4 area include Middletown, Arden, Ardencroft, Ardentown, Newark, Odessa, and Townsend.

Phase II: Urbanized Areas, including Dover, Newark and Wilmington.

#### **District of Columbia**

Phase I: MS4 map includes entire jurisdiction.

#### Pennsylvania

Phase I: Jurisdictional boundaries of Philadelphia and Allentown (could not locate copies of these Phase I MS4 permits)

Phase II: urbanized area. Additional designated MS4s include the cities of Butler, New Castle, and Meadville (entire jurisdiction)

#### Maryland

Phase I: entire jurisdiction for Phase I MS4s. City of Baltimore, and the Counties of Anne Arundel County, Baltimore County, Carroll County, Charles County, Frederick County, Harford County, Howard County, Montgomery County, and Prince George's County.

Phase II: urbanized area. Additional designations include Cecil and Washington Counties.

NOTE: List of regulated MS4s is posted at

http://www.mde.maryland.gov/programs/water/stormwatermanagementprogram/pages/programs/waterprograms/sedimentandstormwater/storm\_gen\_permit.aspx (verified 2/8/2013)

#### Virginia

Phase I: entire jurisdiction for Phase I MS4s (based on email from Doug Fritz on May 5, 2010). Counties of Arlington County, Chesterfield County, Fairfax County, Henrico County, and Prince William County. Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Virginia Beach.

Phase II: urbanized areas. There are no additional designations outside of the UA.

NOTE: List of regulated MS4s as of October 9, 2009 is posted at <a href="http://www.dcr.virginia.gov/stormwater\_management/documents/vams4s.pdf">http://www.dcr.virginia.gov/stormwater\_management/documents/vams4s.pdf</a> (verified 2/5/2013)

#### West Virginia

Phase II: urbanized areas. There are no additional designations outside of the UA.

NOTE: List of regulated MS4s as of December 2009 is posted at <a href="http://www.dep.wv.gov/WWE/Programs/stormwater/MS4/permits/Documents/MS4%20Listing%20Includes%20waived%20municipalities%20w%20permit%20number.pdf">http://www.dep.wv.gov/WWE/Programs/stormwater/MS4/permits/Documents/MS4%20Listing%20Includes%20waived%20municipalities%20w%20permit%20number.pdf</a> (verified 2/5/2013)

#### Alabama

Phase I: Includes the following primary permittees, along with co-permittees:

- Mobile County, Baldwin County, City of Fairhope, City of Chickasaw, City of Satsuma, City of Daphne, City of Spanish Fort, City of Saraland, City of Mobile, City of Creola, City of Prichard
- Huntsville, City of Madison
- Jefferson County, City of Adamsville, City of Bessemer, City of Birmingham, Town of Brighton,
  City of Brookside, City of Fairfield, City of Fultondale, City of Gardendale, City of Homewood,
  City of Hoover, City of Hueytown, City of Irondale, City of Leeds, City of Lipscomb, Town of
  Maytown, City of Midfield, City of Mountain Brook, Town of Mulga, City of Pleasant Grove, City
  of Tarrant, City of Trussville, City of Vestavia Hills, City of Centerpoint, City of Clay
- · Shelby County, City of Alabaster, City of Indian Springs, City of Moody, City of Pelham
- City of Montgomery, Montgomery County

Phase II: Urbanized area

#### Florida

Phase I: The primary permittee is listed first, along with co-permittees

- Miami
- Dade County, City of Aventura, Town of Bay Harbor Islands, Town of Golden Beach, Indian Creek Village, City of Miami Beach, North Bay Village, City of Opa Locka, City of Sunny Isles Beach, Village of El Portal, Bal Harbour Village, City of Coral Gables, City of Hialeah Gardens, Village of Key Biscayne, Village of Miami Shores, City of North Miami, Village of Pinecrest, Town of Surfside, City of Homestead, Town of Medley, City of Miami Springs, City of North Miami Beach, City of South Miami, City of West Miami
- Sarasota County, City of North Point, City of Sarasota, City of Venice, Town of Long Boat Key
- Pinellas County, City of Bellair Bluffs, City of Golfport, City of Largo, City of Oldmar, Town of Redington Shores, City of Seminole, City of Treasure Island, Town of Bellair, City of Clearwater, City of Indian Rocks Beach, City of Maderia Beach, City of Pinellas Park, City of Safety Harbor, City of South Pasadena, City of Bellair Beach, Town of Kenneth City, Town of North Redington Beach, City of St. Petersburg Beach, City of Tarpon Springs, Town Redington Beach, City of Dunedin
- Hillsborough county
- St. Petersburg
- Tampa
- Temple Terrace
- Orange County, City of Belle Isle, City of Edgewood, City of Ocoee, City of Winter Garden, City of Apopka, City of Eatonville, City of Maitland, City of Winter Park
- · Jacksonville, City of Atlantic Beach, Neptune Beach
- Jacksonville Beach
- Orlando
- Polk County, City of Alfred, Town of Hillcrest-Heights, City of Lakeland, City of Winter Haven, City
  of Bartow, City of Fort Meade, City of Haines City, Town of Lake Hamilton, City of Mulberry, City
  of Auburndale, Town of Dundee, City of Eagle Lake, City of Davenport, City of Frostproof, Village
  of Higland Park, City of Lake Wales, City of Polk City

- Broward County, City of Coconut Creek, City of Cooper City, City of Coral Springs, City of Daina, City of Deerfield Beach, City of Hallandale, Town of Lauderdale by the Sea, City of Lauderdale Lakes, City of Lauderhill, City of Lighthouse Point, City of Margate, City of Wilton Manors, City of Miramar, City of North Lauderdale, City of Oakland Park, City of Parkland, Town of Pembroke Park, City of Pembroke Pines, City of Plantation, City of Pompano Beach, Village of Sea Ranch Lake, City of Sunrise City, City of Tamarac
- Ft. Lauderdale
- Palm Beach County, City of Atlantis, City of Bell Glade, City of Boca Raton, City of Boynton Beach, Town of Cloud Lake, Town of Deray Beach, Town of Golfview, City of Green Acres, Town of Gulf Stream, Town of Haverhill, Town of Highland Beach, Town of Juno Beach, Town of Jupiter, Town of Jupiter Inlet Colony, City of Rivera Beach, Town of Lake Clark Shores, Town of Lake Park, City of Lake Worth, Town of Lantana, Town of Manalapan, Town of Magnolia Park, Village of North Palm Beach, Town of Ocean Ridge, City of Pahokee, Town of Palm Beach, City of Palm Beach Gardens, Town of Palm Beach Shores, Village of Palm Springs, City of South Bay, Town of South Palm Beach, Village of Tequesta, City of West Palm Beach, Village of Royal Palm Beach
- Escambia County, City of Pensacola, Town of Century
- City of Hollywood
- Hilaleah
- Pasco County, City of Dade City, City of Port Richey, Town of St. Leo, City of New Port Richie, City of San Antonio, City of Zephyrhillis
- Leon County
- Tallahassee
- Lee County, City of Sanibel, City of Cape Coral, City of Fort Myers, Town of Fort Myers Beach, City of Bonita Springs
- Manatee County, City of Anna Maria, City of Bradenton Beach, City of Holmes Beach, City of Palmentto
- Bradenton
- Seminole County, City of Lake Mary, City of Alatamonte Springs, City of Winter Springs, City of Oviedo, City of St. Sanford, City of Longwood, City of Castleberry

Phase II: urbanized areas, with additional designated cities (outside of UA) of Belle Glade, Key West, Lady Lake town, Marathon (entire jurisdiction for each)

NOTE: A list of all MS4s in FL is available at <a href="http://www.dep.state.fl.us/water/stormwater/npdes/docs/all\_ms4\_by\_county.pdf">http://www.dep.state.fl.us/water/stormwater/npdes/docs/all\_ms4\_by\_county.pdf</a>

#### Georgia

Phase I:

- Clayton County (lead applicant): Forest Park, Jonesboro, Lake City, Lovejoy, Morrow and Riverdale.
- DeKalb County (lead applicant): Avondale Estates, Chamblee, Clarkston, Decatur, Doraville, Lithonia, Pine Lake and Stone Mountain.
- Gwinnett County (lead applicant): Berkeley Lake, Buford, Dacula, Duluth, Grayson, Lawrenceville, Lilburn, Norcross, Snellville, Sugar Hill and Suwanee
- Acworth
- Alpharetta
- Atlanta

- Austell
- Cobb county
- College Park
- East Point
- Fairburn
- Fulton County
- Hapeville
- Kennesaw
- Marietta
- Palmetto
- Powder Springs
- Roswell
- Smyrna
- Union City
- · Bibb County and Macon.
- Chatham County, Bloomingdale, Garden City, Pooler, Port Wentworth, Thunderbolt and Tybee Island.
- Augusta-Richmond County
- Columbus-Muscogee County
- Savannah
- Forsyth County

NOTE: List of Phase I MS4s at:

http://www.georgiaepd.org/Files PDF/techguide/wpb/MS4 Stormwater Phase I rev2013.pdf

Phase II: Urbanized areas; also City of Cordele in Crisp County (designated – entire jurisdiction)

NOTE: List of Phase II MS4s at

http://www.georgiaepd.org/Files PDF/techguide/wpb/MS4 Stormwater Phase II rev2011.pdf

#### Kentucky

Phase I:

- Louisville, Jefferson County, City of Prospect, City of Shively, City of St. Matthews, City of Jeffersontown, City of Louisville, City of Anchorage
- Lexington-Fayette County

Phase II: urbanized areas; for cities, the entire jurisdiction is an MS4; for counties, only the UA is an MS4.

# Mississippi

Phase I: Jackson

Phase II: urbanized area

NOTE: Phase II MS4 list:

http://www.deq.state.ms.us/MDEQ.nsf/pdf/epd PhaseIIregulatedMS4s/\$File/Phase II Regulated MS4 s.pdf?OpenElement

#### **North Carolina**

Tt used GIS files sent by the State on June 6, 2010 to John Kosco, Tt.

Downloaded MS4 permit list from <a href="http://portal.ncdenr.org/web/wq/ws/su">http://portal.ncdenr.org/web/wq/ws/su</a> on Feb. 5, 2013 <a href="http://portal.ncdenr.org/web/wq/ws/su/phase2">http://portal.ncdenr.org/web/wq/ws/su/phase2</a> (verified 2/6/2013)

#### **South Carolina**

Phase I: Entire jurisdiction of City of Columbia, Greenville County, Lexington County, and Richland County

Phase II: urbanized area; additional designations included Aiken County, Darlington County, Florence County, Georgetown County, and Kershaw County.

NOTE: Phase II list at <a href="http://www.scdhec.gov/environment/water/docs/swnms4small07.pdf">http://www.scdhec.gov/environment/water/docs/swnms4small07.pdf</a>

#### Tennessee

Phase I: Nashville, Davidson County, Knoxville, Chattanooga, Memphis

Phase II: urbanized area, with additional designated cities (outside of UA) of Brownsville, Columbia, Cookeville, Dyersburg, Greeneville, McMinnville, Shelbyville, and Union City (entire jurisdiction)

NOTE: MS4 list at: <a href="http://www.tn.gov/environment/wpc/stormh2o/docs/MS4s">http://www.tn.gov/environment/wpc/stormh2o/docs/MS4s</a> Jan2012.pdf (verified 2/5/2013)

#### Illinois

Phase I: Entire jurisdiction of Rockford

Phase II: Urbanized area, plus the designated cities (outside of UA) of Dolton, Woodstock (entire jurisdiction)

NOTE: List of MS4s at http://www.epa.state.il.us/water/permits/storm-water/ms4-status-report.pdf

#### Indiana

Phase I: Entire jurisdiction of Indianapolis

Phase II: For cities, entire jurisdiction; for Counties, only the urbanized portion

Phase II – list of MS4s downloaded from http://www.state.in.us/idem/5437.htm (verified 2/5/2013)

NOTE: MS4 boundary areas are described at http://www.state.in.us/idem/5436.htm.

#### Michigan

Phase I: Entire jurisdiction of Ann Arbor, Flint, Grand Rapids, Warren, Sterling Heights, University of Michigan. NOTE: University of Michigan was not mapped, but was assumed to be within the jurisdictional area of Ann Arbor and Flint.

Phase II: Urbanized area

#### Minnesota

Shapefiles of MS4s in Minnesota sent by State on May 17, 2010 to John Kosco.

#### Ohio

Phase I: Entire jurisdiction of Columbus, Toledo, Akron, and Dayton.

Phase II: Urbanized areas

Phase II: List of permittees for small MS4s and in rapidly developing watersheds at <a href="http://www.epa.ohio.gov/dsw/permits/gplist.aspx">http://www.epa.ohio.gov/dsw/permits/gplist.aspx</a>

#### Wisconsin

Phase I: Entire jurisdiction of Milwaukee, Madison, Cedarburg, Chippewa Falls, Cudahy, Eau Claire, Grafton City, Bayside, Brown Deer, Glendale, Fox Point, River Hills, Shorewood, Whitefish Bay, Oak Creek, Sheboygan, Sheboygan Falls, South Milwaukee, St. Francis, Mequon

Phase II: Urbanized areas; for cities, the entire jurisdiction is an MS4; for counties, only the UA is an MS4.

Downloaded list of regulated MS4s on Feb. 5, 2013 at <a href="http://dnr.wi.gov/topic/stormwater/data/Municipal/">http://dnr.wi.gov/topic/stormwater/data/Municipal/</a> (verified 2/5/2013)

#### **Arkansas**

Phase I: Jurisdiction of Little Rock

Phase II: Urbanized area, plus designated cities of Conway, Maumelle (entire jurisdiction)

NOTE: List of Phase IIs at

http://www.adeq.state.ar.us/water/branch\_permits/general\_permits/stormwater/pdfs/notice\_of\_inten\_tMS4\_041006.pdf

http://www.adeq.state.ar.us/water/branch\_permits/general\_permits/stormwater/ms4/ms4.htm (verified 2/6/2013)

#### Louisiana

Phase I: Jurisdictions of Baton Rouge/E. Baton Rouge Parish, Jefferson Parish, New Orleans, and Shreveport

Phase II: Urbanized area

#### **New Mexico**

Phase I: jurisdiction of Albuquerque

Phase II: urbanized areas

#### Oklahoma

Phase I: Jurisdictions of Oklahoma City and Tulsa

Phase II: urbanized areas

#### Texas

Phase I: Jurisdictions of El Paso, Corpus Christi, Pasadena, Abilene, Amarillo, Arlington, Austin, Beaumont, Dallas, Ft. Worth, Garland, Houston-Harris County, Irving, Laredo, Lubbock, Mesquite, Plano, San Antonio, Waco

Phase II: Urbanized areas

#### Iowa

Phase I: Entire jurisdiction of Cedar Rapids and Des Moines

Phase II: Urbanized areas, with additional designation of Marshalltown, Ottumwa, and Storm Lake (entire jurisdiction); for cities, the entire jurisdiction is an MS4; for counties, only the UA is an MS4.

## List of MS4s is at

 $\frac{http://www.iowadnr.gov/InsideDNR/RegulatoryWater/StormWater/MS4Permittees.aspx}{2/7/2013)} \ (verified 2/7/2013)$ 

#### Kansas

Phase I: Entire jurisdiction for Wichita, Kansas City, and Topeka.

#### Phase II:

- Urbanized area
- The following cities were excluded from the Phase II area (received waivers) (see http://www.kdheks.gov/muni/download/5Urban.pdf):
  - For the St. Joseph UA that is mostly in Missouri, do not include the small portion of the UA that is in Kansas
  - For Topeka UA, exclude Topeka township
  - For Lawrence UA, exclude Wakarusa township and the portion of the UA in unincorporated Douglas County
  - For Kansas City UA, exclude Westwood Hills, Countryside, Lake Quivira, Mission Woods, Monticello township, Shawnee township, Olathe township and Oxford township
  - For Wichita UA, exclude Eastborough, Attica township, Bruno township, Waco township, Delano township, Kechi township, Rockford township, Ohio township, Park township, Gore township, Gypsum township, Sumner county and Butler county
- The following 19 cities were designated outside of urbanized areas (entire jurisdiction was mapped) <a href="http://www.kdheks.gov/muni/download/NonUrban.pdf">http://www.kdheks.gov/muni/download/NonUrban.pdf</a>
  - 1. Arkansas City
  - 2. Coffeyville
  - 3. Dodge City
  - 4. El Dorado
  - 5. Emporia
  - 6. Garden City
  - 7. Great Bend
  - 8. Hays
  - 9. Hutchinson
  - 10. Junction City
  - 11. Leavenworth
  - 12. Manhattan
  - 13. McPherson
  - 14. Newton
  - 15. Ottawa
  - 16. Parsons
  - 17. Pittsburg

18. Salina

19. Winfield

NOTE: MS4 list: http://www.kdheks.gov/stormwater/download/Phase I and II MS4s in Kansas.pdf

#### Missouri

Phase I: Entire jurisdiction for Independence, Kansas City, and Springfield

Phase II: Entire jurisdiction for any MS4 entirely or partially in urbanized area.

Phase II: List of Phase II MS4s at <a href="http://www.dnr.mo.gov/eminnv/wpp/docs/subject-ms4s-">http://www.dnr.mo.gov/eminnv/wpp/docs/subject-ms4s-</a> january2013.pdf (verified 2/8/2013)

#### Nebraska

Phase I: Entire jurisdiction for Lincoln and Omaha

Phase II: Urbanized area, with the following designated cities that are outside of the UA (entire jurisdiction): Beatrice, Columbus, Fremont, Grand Island, Hastings, Kearney, Lexington, Norfolk, North Platte, and Scottsbluff

Colorado

Phase I: Entire jurisdiction of Denver, Lakewood, Aurora, Colorado Springs

Phase II: Urbanized area; for cities, the entire jurisdiction is an MS4; for counties, only the UA is an MS4. Also include designated cities outside of UA (entire jurisdiction): Brighton, Canon City, Durango, Montrose, Northglenn

NOTE: Permitted MS4s: http://www.cdphe.state.co.us/wq/PermitsUnit/MS4/MS4Permittees.pdf

**Montana** 

Phase II: urbanized areas, except include the entire jurisdiction for Bozeman, Butte, Helena, and Kalispell

List of Phase II permittees: <a href="http://deq.mt.gov/wqinfo/MPDES/StormWater/ms4.mcpx">http://deq.mt.gov/wqinfo/MPDES/StormWater/ms4.mcpx</a> fact sheet for 2010 general permit

**North Dakota** 

Phase II: urbanized areas - for cities, the entire jurisdiction is an MS4; for counties, only the UA is an MS4. In addition, cities outside of urbanized areas designated include Dickinson, Jamestown, Minot, and Williston (entire jurisdiction)

http://www.ndhealth.gov/WQ/Storm/MS4/MS4Permit.htm

South Dakota

Phase I: Entire jurisdiction of Sioux Falls

Phase II: urbanized areas; for cities, the entire jurisdiction is an MS4; for counties, only the UA is an MS4.

**Utah** 

Phase I: Entire jurisdiction of Salt Lake and unincorporated Salt Lake County

Phase II: urbanized area

Wyoming

Phase II: urbanized area

17

#### Arizona

Phase I: Entire jurisdiction for Glendale, Mesa, Phoenix, Pima County, Scottsdale, Tempe, Tucson

Phase II: Urbanized areas, and the additional designated cities outside of UAs (entire jurisdiction) that includes Camp Verde, Cottonwood, Douglas, Fountain Hills, Lake Havasu, Nogales, Sedona and Sierra Vista.

NOTE: http://www.azdeq.gov/environ/water/permits/stormwater.html#phase (verified 2/7/2013)

#### California

Used Phase I and Phase II MS4 GIS coverage created for the State of California by Tt.

Phase I MS4 permits at

http://www.waterboards.ca.gov/water\_issues/programs/stormwater/phase\_i\_municipal.shtml (verified 2/7/2013)

Phase II traditional small MS4s are listed at

http://www.waterboards.ca.gov/water issues/programs/stormwater/docs/phsii2012 4th/att a traditional final.pdf (verified 2/7/2013)

Phase II non-traditional small MS4s are listed at

http://www.waterboards.ca.gov/water issues/programs/stormwater/docs/phsii2012 4th/att b non-traditionals final.pdf

#### Hawaii

Phase I: Entire jurisdiction of the City of Honolulu.

Phase II: Urbanized areas

#### Nevada

Phase I: Entire jurisdiction of the City of Reno, Las Vegas, Henderson, North Las Vegas, Sparks

Phase II: Urbanized area, plus the entire jurisdiction of the city of Elko.

Phase II List: http://ndep.nv.gov/bwpc/small\_separate\_storm\_sewer\_systems.pdf

#### Alaska

Phase I: Entire jurisdiction for Anchorage.

Phase II: Fairbanks urbanized area.

List of regulated MS4s is posted at <a href="http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/MS4+requirements+-+Region+10">http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/MS4+requirements+-+Region+10</a> (verified 2/7/2013)

#### Idaho

Phase I: Entire jurisdiction of Boise and Garden City, ID

Phase II: urbanized areas in Idaho

List of regulated MS4s is posted at <a href="http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/MS4+requirements+-+Region+10">http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/MS4+requirements+-+Region+10</a>

#### Oregon

Phase I: Entire jurisdiction of:

- Clackamas County Urban Growth Boundary and 10 co-permittees
- City of Portland Urban Services Boundary
- City of Eugene
- · City of Salem
- · Clackamas County Urban Growth Boundary
- Clean Water Services entire jurisdiction for the MS4 as well as the urban growth boundary of Washington County.
- Entire jurisdiction of Gresham and Fairview along with the small areas of unincorporated Multnomah County within the urban services boundaries of the two cities.

Phase II: Urbanized areas and the entire jurisdictional area of Ashland, Bend, Corvallis, Keizer, Medford, Philomath, Springfield, Troutdale, Turner, Wood Village, Central Point, Phoenix, Talent.

NOTE: Phase II list at http://www.deg.state.or.us/wg/stormwater/docs/phlIms4list.pdf

#### Washington

Phase I: Entire jurisdiction for Seattle and Tacoma. Unincorporated areas of Clark, King, Snohomish, and Pierce Counties.

Phase II: Entire jurisdiction for covered cities and urbanized area and urban growth area for counties. In addition, entire jurisdiction for the following cities outside of the UA: Anacortes, Aberdeen, Centralia, Oak Harbor, Port Angeles, Ellensburg, Moses Lake, Pullman, Sunnyside & Walla Walla.